

Remarks

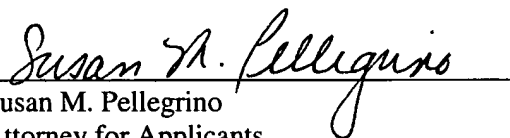
By way of this Preliminary Amendment, claims 1-26 are pending. Claims 1-12 and 18-26 have been amended. These claim amendments are being made solely for purposes of placing the claims in a format appropriate for U.S. prosecution. Applicants submit that the amendments do not change the scope of the claims as originally filed. Such amendments are therefore made to address formalities in the claim format and are not related to the patentability of the subject matter of the claims. No new matter was added by way of these claim amendments and additions.

Conclusion

Applicants believe that the subject matter of the pending claims is patentable and that the instant application should accordingly be allowed. If the Examiner believes that a conversation with Applicants' attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned attorney at (203) 812-6450.

Respectfully submitted,

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Amendment to the Specification (Attorney Docket No. LeA 36 282)

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Please amend the specification by inserting this paragraph on page 1, line 1 of the specification following the title:

This application is a 371 of PCT/EP2003/010376, filed September 18, 2003.

Amended Claims (Attorney Docket No. LeA 36 282)

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1. (Currently amended) A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of
  - i) contacting a test compound with a PDE11A polypeptide,
  - ii) detecting binding of said test compound to said PDE11A polypeptide.
2. (Currently amended) A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of
  - i) determining the activity of a PDE11A polypeptide at a certain concentration of a test compound or in the absence of said test compound,
  - ii) determining the activity of said polypeptide at a different concentration of said test compound.
3. (Currently amended) A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of
  - i) determining the activity of a PDE11A polypeptide at a certain concentration of a test compound,
  - ii) determining the activity of a PDE11A polypeptide at the presence of a compound known to be a regulator of a PDE11A polypeptide.

4. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the step of contacting is in or at the surface of a cell.
5. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the cell is in vitro.
6. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the step of contacting is in a cell-free system.
7. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the polypeptide is coupled to a detectable label.
8. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the compound is coupled to a detectable label.
9. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the test compound displaces a ligand which is first bound to the polypeptide.
10. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the polypeptide is attached to a solid support.
11. (Currently amended) The method of ~~any of claims~~ claim 1 to 3, wherein the compound is attached to a solid support.
12. (Currently amended) A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of
  - i) contacting a test compound with a PDE11A polynucleotide,
  - ii) detecting binding of said test compound to said PDE11A polynucleotide.
13. (Original) The method of claim 12 wherein the nucleic acid molecule is RNA.

14. (Original) The method of claim 12 wherein the contacting step is in or at the surface of a cell.
15. (Original) The method of claim 12 wherein the contacting step is in a cell-free system.
16. (Original) The method of claim 12 wherein polynucleotide is coupled to a detectable label.
17. (Original) The method of claim 12 wherein the test compound is coupled to a detectable label.
18. (Currently amended) A method of diagnosing a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of
  - i) determining the amount of a PDE11A polynucleotide in a sample taken from said mammal,
  - ii) determining the amount of PDE11A polynucleotide in healthy and/or diseased mammals.
19. (Currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising a therapeutic agent which binds to a PDE11A polypeptide.
20. (Currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising a therapeutic agent which regulates the activity of a PDE11A polypeptide.
21. (Currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in

a mammal comprising a therapeutic agent which regulates the activity of a PDE11A polypeptide, wherein said therapeutic agent is

- i) a small molecule,
- ii) an RNA molecule,
- iii) an antisense oligonucleotide,
- iv) a polypeptide,
- v) an antibody, or
- vi) a ribozyme.

22. (Currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising a PDE11A polynucleotide.

23. (Currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising a PDE11A polypeptide.

24. (Currently amended) ~~Use of regulators of a PDE11A for the preparation of a pharmaceutical composition~~ A method for the treatment of a disease comprised in a group of diseases consisting of selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising administering to a mammal an effective amount of a regulator of PDE11A.

25. (Currently amended) Method for the preparation of a pharmaceutical composition useful for the treatment of a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal comprising the steps of

- i) identifying a regulator of PDE11A,

- ii) determining whether said regulator ameliorates the symptoms of a disease ~~comprised in a group of diseases consisting of~~ selected from peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases in a mammal; and
  - iii) combining of said regulator with an acceptable pharmaceutical carrier.
26. (Currently amended) ~~Use of a regulator of PDE11A~~ A method for the regulation of PDE11A activity in a mammal having a disease ~~comprised in a group of diseases consisting of~~ selected from disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease and genitor-urinary diseases comprising administering to a mammal an effective amount of a regulator of PDE11A.